

ABSTRACTTITLE:

Internal combustion engine with direct injection and sparking plug with precombustion chamber, ignition method and application.

APPLICANT:

PEUGEOT CITROËN AUTOMOBILES S.A.

INVENTORS:

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The invention concerns an internal combustion engine with at least one engine member, the engine member including a combustion chamber (4) of a combustible mixture with fuel and oxidant components fitted with a compression system (9), an ignition system (7) of the combustible mixture by an igniter, sequential let-through devices for the fuel and oxidant components and for the combustion products. According to the invention, the ignition system includes a closed head (6)(12a) substantially spherical enclosing the igniter in a precombustion chamber, the head including a set of orifices (5) intended to communicate the combustion chamber and the precombustion chamber so that combustible mixture may flow into the precombustion chamber, and at least one of the let-through devices is a direct injector in the combustion chamber for the fuel and/or oxidant components, in all or in part. A method and an application are also described.

FIGURE 4